

## POLYGALA CYMOSA (POLYGONACEAE) NEW TO TEXAS

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### ABSTRACT

*Polygala cymosa* Walter is reported as new to Texas.

### RESUMEN

Se cita *Polygala cymosa* Walter como nueva para Texas.

The genus *Polygala*, commonly known as milkwort, includes about 550 species of worldwide distribution. These herbaceous perennials generally have simple entire leaves and inflorescences terminating the branches. Of the 26 species reported in Texas, ten species occur in the Pineywoods of East Texas.

Herbarium studies have resulted in the discovery of a specimen of *Polygala cymosa* Walter from the Pineywoods, which is herein reported as new to the state.

Voucher specimen: **TEXAS. Jasper Co.:** 7 mi S of Kirbyville, ca. 2 mi E of Hwy 96, ca. 0.2 mi N of end of unpaved road near Nichols Creek, wooded uplands, 17 Oct 1977, *Ajilvsgi* 5505 (SMU).

*Polygala cymosa*, commonly known as tall pinebarren milkwort, is a plant of 40–120 cm in height. The flowers are lemon-yellow when fresh, and arise from branches emanating from a solitary stem. The linear basal leaves narrow distally and are 4–7 cm long. The flowers turn dark green upon drying. The species is known to occur in Alabama, Delaware, Florida, Georgia, Louisiana, Maryland, Mississippi, North Carolina, and South Carolina (USDA, NRCS 2009). Because this is the only known site of *P. cymosa* in Texas, and there is only one known site in western Louisiana (Thomas and Allen 1998), the species is considered to be a rare peripheral in the West Gulf Coastal Plain. The species is typically found in wet pinelands, swamps and ditches. The Texas site contains longleaf pine wetland savannas, slightly drier sandy clay upland longleaf pine savannas, and seepage bogs with *Sarracenia alata*.

*Polygala nana* and *P. ramosa* are the two other species of *Polygala* in East Texas with yellow perianth. The following key may be used to distinguish among the three species.

### KEY TO THE YELLOW FLOWERED SPECIES OF POLYGALA OF THE PINEYWOODS OF TEXAS

[ADAPTED FROM CORRELL AND JOHNSTON (1970) AND RADFORD ET AL. (1968)]

1. Plants 3–15 cm tall, scapose to semiscapose; racemes solitary at tips of stems, capitate to thick-cylindric, about as long as wide (9–20 mm) \_\_\_\_\_ **P. nana**
1. Plants 10–120 cm tall, stems leafy; the racemes leafy, numerous, cymose, each usually about 2x longer than wide, in aggregate the inflorescence (20–)50–150 mm wide.
  2. Plants usually greater than 30 cm tall; basal leaves linear to linear-lanceolate, 3–7 cm long, stem leaves linear to filiform, gradually reduced above \_\_\_\_\_ **P. cymosa**

2. Plants to 30 cm tall; basal leaves elliptic to spatulate, to 2.5 cm long, stem leaves linear, spatulate or elliptic, not reduced above \_\_\_\_\_ **P. ramosa**

Following are brief remarks on the distribution and characteristics of the species mentioned in the key. Information on *Polygala cymosa* is presented above.

*Polygala nana* (Michx.) DC. Southeast Texas (Angelina, Hardin, Jasper, Jefferson, Newton, Sabine, Tyler cos.); United States: Southern North Carolina to Arkansas, south to Florida to Texas. The species is well-marked by the single head-like raceme at the tip of scapelike stems and the licorice odor of the roots (earning it the common name of candy-root).

*Polygala ramosa* Elliott. Southeast Texas (Angelina, Chambers, Hardin, Houston, Jasper, Jefferson, Liberty, Newton, Orange, San Augustine, and Tyler cos.); United States: Coastal plain from Cape May Co., New Jersey, south to Florida, west to Texas. The species is characterized by the amply leaved stems, wide basal leaves, and height to about 30 cm.

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